Author Index

Canadian Journal of Animal Science, Volume 84, 2004

Aalhus, J.L., 301, 377, 631, 661, **762**, **779**
Aali, M., 721
Abrahamsen, M.S., **750**, **756**
Abramson, D., **786**
Acharya, S.N., **780**
Adedokun, S.A., 437
Adeola, O., 437, **789**
Afsharmanesh, M., **786**
Aguilar, A., **768**
Aich, P., **750**, **756**
Alarcón, F.J., **776**, **776**, **793**
Alexander, T.W., **761**, **768**
Alikhani, M., **766**, **769**, **776**
Alvarez, E.G., **768**
Alvarez-Valenzuela, F.D., **769**
Amaral, J., **758**
Anderson, D.M., **791**
Angel, R., **753**
Applegate, T.J., **753**
Aranda-Osorio, G., 81
Arispe-Ramos, L., **769**
Ariza-Nieto, C., **750**
Arthur, P.F., **749**, **766**, **769**
Asamoah, S.A., 149
Atakora, J.K.A., **751**, **785**
Avendano-Reyes, L., **769**

Baah, J., **770**
Babiuk, L.A., **750**, **756**
Baca, S., **787**
Bach, S.J., **763**, **765**, **770**
Bach Knudsen, K.E., 265
Bahonar, S., **786**
Baidoo, S.K., **750**
Bailey, C.R., 741
Bakshi, M.P.S., **770**
Ball, R.O., **751**, **752**, **781**, **782**, **783**, **784**, **785**, **789**
Barbut, S., 391
Baron, V.S., 511, **754**
Barris, W., **757**
Barroso, F.G., **776**, **776**
Barrozo, O., **768**
Basarab, J., **762**, **779**, **780**
Basarab, J.A., 511, **755**
Basarab, J.B., 211
Beauchemin, K.A., 13, 23, 113, , 481, **761**, **765**, **776**, **778**
Beaudry, D., 621
Beaulieu, A.D., **752**
Bechtel, R.,
Bedford, M.R., 397
Begg, A., **750**, **756**
Bégin, G.S., **792**
Benchaar, C., 319, **771**
Benkel, B., **756**, **757**, **758**
Bergen, R.D., 491, **755**, **757**
Berry, R., **760**
Berthiaume, R., 705, **763**, **767**, **771**, **775**
Bertolo, R.F.P., **752**
Best, D.R., 301
Bhandari, S.K., **760**
Bird, S., **764**
Birkedal, E., **775**
Birkett, S.H., **753**
Block, H., **764**
Blümmel, M., 105
Boadi, D., 319, 445
Bohlmann, J., **759**
Booth-McLean, M.E., **771**, **779**
Bork, E.W., 149
Boros, D., 421, 429
Brons, E., **772**
Brown, F.A., **771**
Buchanan, C.D., **768**
Buckley, K., 445
Budgell, K.L., 745
Burton, D., 445

Calberry, J.M., **767**
Caldwell, T.R., **772**
Campbell, L.D., 421, 429, **784**
Cant, J.P., **768**
Cara, J.B., **776**, **793**
Caron, N., 589
Carrière, P.D., 145
Carrillo, G., **768**
Casson, J., **754**
Caston, L.J., 545
Cervantes, M., **787**, **788**
Charmley, E., 237, 245, 277, **762**, **772**
Cheatham, R.C., 741
Cheeke, P.R., 349
Cheng, K.M., 721
Cherian, G., 221
Chi, E., **787**
Chiquette, J., 305, 319
Chouinard, P.Y., **771**, **775**
Chowdhary, B.P., **758**
Christensen, C.R., 171, 523
Christensen, D.A., 171, 255, 523, **779**
Christopherson, R., 367, **777**
Church, J., **779**
Clark, O.G., **751**, **752**
Clowes, E.J., **784**
Cockwill, C.L., **763**
Cohen, R.D.H., 91, 125
Colombatto, D., 13, 23
Connor, M.L., **789**, **790**
Cook, N., 73, **779**
Cooper, S., **774**
Copado, F., **787**
Correa-Calderon, A., **769**
Cottrill, M., 697, **785**
Coulthart, M. B., **749**
Crews, D.H., Jr., 589, **749**, **756**, **758**, **780**
Croy, D., **763**
Cuca, M., **787**
Currie, R., **784**
Cutler, J.N., 171

Daigle, J.P., 57
Damgaard, D., **761**, **768**
Dayani, O., 113
de Jong, P.J., **757**
de Lange, C.F.M., 549, 697, **753**, **782**, **785**, **778**, **789**
de Oña, C., **776**, **793**
de Passillé, A.M., 567
Deng, M.Y., **761**, **768**
Dening, B., **792**
Depalme, A.J., 511
Deregt, D., 73
Desroches, G., 73
Dewey, C., **785**
Díaz, M., **793**
Dickie, J.W., 187, 197
Dikeman, M.E., 599
Dixon, W.T., 367, **761**, **768**, **777**, **781**, **783**
Dohoo, I.R., 165
Donnelly, J.R., 125
Drew, M.D., 523
Droppo, T., 501
Du, W., **791**
Dubeski, P.L., 73
Duff, G.C., 741
Dugan, M.E.R., 301, 377, 631, 661, **772**, **777**
Dugas, W.A., **754**
Duynisveld, J.L., 237, 245, **762**, **772**

Ebadi, M.R., **784**, **786**

Page numbers in **bold** refer to abstracts.

Edeogu, I., **751**
Edris, M.A., **766**, **769**, **776**, **784**, **790**
Egan, A.R., **765**
Einarson, M.S., **760**, **767**
Elam, N.A., 309
Elango, R., **781**
Elisabete, M., **758**
Elliot, J.I., 161
Ellis, J.L., **768**
Eng, K.S., **773**
Entz, T., 113, 731
Erickson, G.E., **764**
Espinoza, S., **787**

Farmer, C., 573, 581, 621
Faucitano, L., 57
Feddes, J., **752**
Fehr, M., **779**
Fernandes, T.L., 361
Figueroa, J.L., **787**
Fisette, K., 573, 581
Fisher, J.W., **773**
Fortin, A., 297
Fredeen, A.H., **774**
Freer, M., 125
French, N., **780**
Fu, A., 367, **757**

Gariépy, C., 57, 639
Garland, G.J., 155
Garner, T., 501, **767**
Genswein, B.M.A., **774**
Ghodratnama, A., 305, 639, 649
Ghorbani, G., 113
Gibb, D.J., **770**, **774**
Gibson, L.L., 631
Giguère, A., 63
Girard, C.L., 63
Giritharan, G., 721
Godson, D.L., 73
Golian, A., **784**
Gómez, R., **787**
Gong, J., 697, **785**, **789**, **791**
Gonthier, C., 705, **775**
Goonewardene, L., 1, 291, 537, **775**, **778**, **780**
Govindasamy, N., **749**
Gozho, G.N., **759**, **761**, **787**
Graser, H-U., **769**
Griebel, P., **750**, **756**
Grings, E.E., 105
Grummer, R.R., 337
Grunder, A.A., 187, 197
Guay, F., 63
Guenter, W., 421, 429
Guercio, S., 211, **754**, **755**

Haferkamp, M.R., 105
Hansen, C., 211, 367, **754**, , **755**, **757**, **758**, **759**
Hansen, J.R., **765**
Harmon, D.L., 309
Harte, R.D., **783**
Hassanat, F., 737
Hawkins, A.M., **781**
Hayirli, A., 337
He, G., **750**
He, J., **792**
He, M., 537
Herd, R.M., **766**, **769**
Hindrichsen, I.K., 265
House, J.D., **782**, **783**, **786**, **790**
Howard, M.D., 91
Hristov, A.N., **780**
Htoo, J.K.K., **787**
Hudson, R.J., 149
Huff, P.W., 49
Humphreys, S., **765**
Hutcheson, D.P., **773**

Imamidoost, R., **768**
Inzunza, G., **768**
Irving, B.D., 149
Ivan, M., 731
Iwaasa, A.D., **775**

Jafari, A., **766**, **769**, **776**
Jalal, S., **750**, **756**
Jansen, G.B., **756**
Janz, J.A.M., 377
Jeaurond, E.A., **782**, **788**
Jennings, J.C., **761**, **768**
Jeremiah, L.E., 631
Jiang, Z.H., **755**
Jimenez, D., **768**
Joern, B.C., **751**
Johnson, N.C., **783**
Johnson, R., **770**, **791**
Johnston, D.J., **769**
Jones, O., 421, 429

Kaidi, O., **776**
Kaiser, A., **764**
Kaushal, S., **770**
Kaushik, R.S., **750**
Keefe, G.P., 165
Keisler, D.H., **754**
Kemp, R.A., 589
Kennedy, A.D., 133, 491, **759**, **760**
Kies, A.K., **788**
King, D.J., **773**
Kirschenman, R., **783**
Klooster, H., **777**
Klopfenstein, T.J., **764**
Koenig, K.M., 481, **776**
Kolbehdari, D., **756**
Kopp, J.C., 529
Korver, D., 411, **784**
Kramer, J.K.G., **772**
Krause, D.O., **759**
Kreuzer, M., 265
Krueger, A.H., **768**

LaBine, C., **754**
Laforest, J.P., 63, 573, 581
Lafrenière, C., **763**
Landry, S., 377
Larney, F.J., **763**
Larsen, I.L., 301, 377, 631, 661
Lawson, T.J., 491
Leeson, S., 545
Lemay, S.P., 717
Leonard, J., **751**
Lévesque, J., 57
Li, B.T., **777**
Li, C., 211, 367, **754**, **755**, **756**, **757**, **758**, **759**
Li, H., **755**
Li, M., 697, **785**
Li, S., 689
Liao, S.F., **788**
Libao-Mercado, A.J., **788**
Liebert, F., **787**
Ljøkjel, K., 673
Lobo, S., **757**
Lopetinsky, K., **792**
Lowerison, M., 589
Lozeman, F.J., 49
Luimes, P.H., **768**
Lukefahr, S.D., 349
Lyle, K.L., **780**
Lysyk, T.J., 155

Machmüller, A., 265
MacInnis, R., **777**
MacIsaac, J.L., **784**, **791**
Macmillan, K.L., **765**
Madsen, J., 265
Main, M., **774**
Majak, W., 155
Mandell, I.B., **755**, **758**, **759**, **766**
Martínez, T.F., **776**, **776**, **793**
Marx, T., 291, **763**, **765**, **775**
Massé, D., 319
Mathison, G.W., 455, 467, **755**
Matte, J.J., 63
Matthews, L.R., **767**
McAllister, T.A., 81, 611, **761**, **763**, **764**, **765**, **768**, **770**, **771**, **774**, **775**, **780**
McCartney, D., 455, 467, 511
McCaughey, W.P., 91, 133, 529
McEwan, P.L., **766**, **788**
McGinn, S.M., **765**
McKay, S.D., **758**
McKinnon, J.J., 81, 255, 523
McKnight, D.R., **773**
McLaren, D.L., **764**

McNitt, J.I., 349
Meadus, W.J., **777**
Mears, G., **779**
Mears, G.J., **771**
Mendivil, O.B., 741
Meng, Y., 211, **757**, **758**
Mielnick, P.C., **754**
Miller, H.M., **791**
Miller, S.P., 37, 177, **755**, **757**, **758**, **759**, **772**
Milligan, D., **779**
Milton, R.L., 165
Minick, J.A, 599
Mir, P.S., 113, 291, 537, 725, **761**, **762**, **774**, **778**, **779**
Mir, Z., 113, 291, 537, **775**
Mirhadi, A., **784**
Moehn, S., **751**, **752**, **785**
Möhn, S., **789**
Mohr, R., **752**
Moibi, J., **777**
Molina-Ramirez, L., **769**
Moon, Y.H., **768**
Moore, A.D., 125
Moore, S.S., 211, 367, **749**, **754**, **755**, **756**, **757**, **758**, **759**, **780**
Moores, K., **769**
Morgavi, D.P., 13, 23
Morin, B., **752**
Morris, J., **788**
Moyano, F.J., **793**
Munksgaard, L., 567
Murdoch, B., 211, **756**, **757**, **758**
Murdoch, G.K., **777**
Mustafa, A.F., 705, 737, **775**
Mutsvangwa, T., **779**

Nagorcka, B.N., **764**
Namkung, H., 697, **789**
Nikkhah, A., **760**
Nkrumah, J.D., 211, **749**, **754**, **755**
Nyachoti, C.M., 549, **781**, **782**, **783**, **786**, **789**, **790**

Obese, F.Y., **765**
Okine, E., 291, 455, 467, 511, 537, **755**, **761**, **762**, **768**, **775**, **777**, **779**, **780**
Olkowski, A.A., 81
Olson, M.E., 155, **763**
Ominski, K.H., 445, **754**
Ominski, K.O., **760**
Opapeju, F.O., **782**, **790**
Osoegawa, K., **757**
Ouellet, D., 277, 705, **771**, **775**
Overend, D., **784**
Owusu-Asiedu, A., 689

Palin, M.F., 63, 621
Partridge, G., **791**
Patience, J.F., 549, 689, 717, **752**, **784**, **792**
Patterson, J.A., **750**
Patton, N.M., 349
Pencharz, P.B., **782**
Penner, L., **760**
Petit, H.V., 277, 705, **767**, **771**, **775**
Petruk, A., 411
Pink, D., **781**, **783**
Pishnamazi, A., **790**
Plaizier, J.C., 501, **759**, **760**, **767**, **772**
Pollak, E.J., 599
Poppe, C., **791**
Potter, A., **750**, **756**
Pourreza, J., **784**, **785**, **786**, **790**
Price, C.A., 145
Price, J., **751**
Price, M.A., 149, **755**

Qiao, F., **768**
Quesnel, H., 581

Racz, V.J., 681
Rafuse, J.L., 397
Rahmani, H.R., **785**
Rajamahendran, R., 721
Ralph, S., **759**
Ramakrishnappa, N., 721
Ramsey, P., **780**
Rana, K.K., **770**
Rangel-Santos, R., **769**
Rathgeber, B.M., **784**
Rawlyk, N., **750**, **756**
Ren, M.Q., 49
Richardson, G., **772**
Richert, B.T., **751**
Rivest, J., 57
Robert, S., 573, 581
Robertson, W.M., 301, 377, 661, **772**, **777**
Rode, L.M., 13, 481
Rodenburg, J., **773**
Rodriguez, J., **768**
Rolland, D.C., 661, **772**
Roso, V.M., 37, **758**
Ross, C.M., 113, **778**
Rossnagel, B.G., 229, 523
Roy, G., **767**
Rushen, J., 567

Sabourin, J.M., **790**
Sadeghi, G., **785**
Salde, R.D., **792**
Samie, A., **784**, **785**
Sanders, S.R., 741
Sanderson, M.A., **753**
Sandford, L.C., **768**
Sands, J., 437, **781**, **789**
Saucedo-Quintero, J.S., **769**
Sauer, W., **752**, **787**, **787**, **792**
Schaefer, A.L. , 73, **767**, **771**, **777**, **779**
Schein, J., **757**
Schenkel, F.S., 37, 177, **755**, **758**, **759**
Schwartzkopf-Genswein, K., **771**, **779**
Scott, S.L., 305, 445, 639, 649, **760**, **764**
Seguin, P., 737
Selinger, L.B., 611
Selvaraj R.K., 221
Shah, M.A., 113, 725, **761**, **762**, **774**, **778**, **779**
Sharma, R., **761**, **768**
Shoveller, A.K., **782**, **783**, **789**
Shrestha, J.N.B., 187, 197
Si, W., **791**
Silversides, F.G., 397, 745
Simmins, H., **791**
Simmins, P.H., 397, 689, **784**
Skinner, R.H., **754**
Skrede, A., 673
Slade, R. D., **791**
Sletsmoen, J., **761**, **787**
Slominski B.A., 421, 429
Small, J.A., 133, 445, 491, 721
Smith, L.F., 717
Soita, H.W., 229, 681, **779**
Soliva, C.R., 265
Soofi-Siawash, R., 455, 467
Sørensen, M., 673
Spaner, D., 291, **775**
Squire, J.M., **782**
Stanford, K., **763**, **765**
Steele, M.A., **768**
Stevens, J.P., 125
Stewart, F., **761**, **787**
Stewart, M., **767**
Storebakken, T., 673
Strauss, C.E., 611
Streeter, M., **774**
Sutton, A.L., **751**
Swanson, K.C., **772**
Swatland, H.J., 385

Taghizadeh, A., **780**
Tan, S., **783**
Taniguchi, M., **759**
Tannock, G.W., **750**
Tate, M., **774**
Tellier, R.C., 455, 467
Tessaro, S.V., 73
Thacker, P.A., 229, 403, 681
Thomas, L.R., 91
Toerien, C.A., **768**
Tong, A.K.W., 73, **779**
Tong, E., **783**
Toplis, P., **791**
Torrentera, N., **787**
Tosh, J.J., 361, 713

Treichel, J.L., 741
Trout, D.R., **768**
Tsao, R., **791**
Turcotte, M., **791**

Urschel, K.L., **782**

Valcour, J.E., 165
Valle, E., **756**, **758**
Van Herk, F.H., **763**
Van Kessel, A., 81
Veira, D.M., 133, 277, 491
Verkerk, G.A., **767**
Vite, A., **768**

Wadhwa, M., **770**
Wallins, G.L., **763**, **765**

Wang, Y., **761**, **764**, **768**, **770**, **780**
Wang, Z., 1, 291, 537, **775**, **780**
Ward, D.R., 133
Webster, J.R., **767**
Weekes, T.L., **768**
Wegner, J., 49
Weselake, R.J., 49
Wettstein, H.-R., 265
Whetsell, A.J., **761**, **768**
Whiting, T., 501
Whitney, T.W., 741
Wichtel, J., **772**
Widyaratne, G.P., **792**
Williams, J., **757**, **758**
Wilson, D.E., 599
Wilson, H.L., **750**, **756**
Wilton, J.W., 177, 361, 713, **755**, **758**
Wittenberg, K.M., 445, 529, **754**, **759**, **760**, **761**, **775**, **787**
Wredle, E., 567
Wright, L.E., **768**
Wright, S.B.M., 91

Yamka, R.M., 309
Yánez, J., **787**
Yang, W.Z., 13
Ye, X., **755**, **758**
Young, D.G., **754**
Yu, H., 697, **785**, **789**, **791**
Yu, J., **749**, **754**, **758**, **759**
Yu, P., 255, 523
Yúfera, M., **793**
Yuill, J., **774**

Zahiroddini, H., **763**, **765**
Zee, J.A., 305
Zhang, Y., **752**, **788**, **792**
Zhou, T., **791**
Zhu, C., **782**
Zijlstra, R.T., 549, 689, 717, **784**, **792**
Zinn, R.A., **768**

Subject Index

Canadian Journal of Animal Science, Volume 84, 2004

Abdominal and intestinal fat
  multi-trait selection in geese, 197
Accretion
  rats fed CLA, 537
Acetic acid, **785**
Acid-base balance
  dietary urea and acid base balance in feedlot steers, 741
Acid detergent fibre, **772**
Acidifiers, **785**
Acute phase response, **759**
Additive effects, **758**
Adipocyte differentiation
  global gene expression in preadipocyte differentiation, 367
Adipose tissue
  PPARγ MRNA in bovine adipose and muscle tissue, 49
Age, **781**
Ageing
  modified beef carcass chilling, 377
  postmortem ageing of bovine muscles, 301
Alfalfa, **760**, **775**
  methane emissions and DMI of steers, 125
  strategies for increased cow-calf productivity, 529
Alfasure™
  prevention of bloat in cattle, 155
Alkane
  alkanes for dairy cows, 277
Alternate day
  winter feeding strategies for beef cows, 511
Amino acid, **786**, **787**, **788**
  extrusion of feeds for mink, 673
Antibiotic, **774**, **791**
Antibiotic substitutes, **791**
Antinutritional factors
  wheat by-products: chemical composition, 421
Apparent and true digestibility, **786**
Apparent metabolizable energy
  laying hens fed wheat, 397, **787**, **790**
Aquaculture, **793**
Arginine biosynthesis, **782**
Auction exposure, **774**
Auditory signals
  training cattle with auditory signals, 567
Auditory stimulus
  recorded gruntings and sow mammary development, 581
  recorded sow nursing grunts in lactation and nursing behaviour, 573
Autoclave, **785**
Automatic milking systems
  training cattle with auditory signals, 567
Average daily gain
  feeding canola oil and tallow affect pigs differently, 661

Bacteriophage, **770**
Bakhtiari breed, **769**, **776**
Bale, **760**
Barley, **764**, **765**, **776**, **783**, **786**
  chemical features of ultra-structural matrix of barley endosperm tissue, 523
  maximizing microbial protein supply to beef cattle, 481
  methane emissions and DMI of steers, 125
Barley grain, **780**
Barrow
  feeding canola oil and tallow affect pigs differently, 661
Bedding material, **763**
Beef, **762**, **772**, **774**
  postmortem ageing of bovine muscles, 301
  ultrasonic imaging at feedlot entry, 165
Beef breeds, **755**, **758**, **759**
Beef bulls, **772**
Beef carcass chilling
  modified beef carcass chilling, 377
Beef cattle, **749**, **754**, **755**, **764**, **776**, **777**, **779**
  carcass trait heritability in four beef breeds, 599
  dietary urea and acid base balance in feedlot steers, 741
  leptin and beef cattle feed efficiency, performance and carcass quality, 211
  maximizing microbial protein supply to beef cattle, 481
  winter feeding of feedlot heifers, 491
Beef cow, **762**, **772**
  silage or silage-straw based diets for beef cows, 245
  strategies for increased cow-calf productivity, 529
  straw-silage diets for lactating beef cows, 237
  winter feeding strategies for beef cows, 511
Beef quality
  beef quality consumer thresholds, 631
Beef steer
  relation of fermentation profiles to weight gain in steers, 105
  steer growth performance in winter, 133
Beef tenderness
  calcium homeostasis in beef steers, 81
Behaviour, **767**, **771**, **774**
  recorded sow nursing grunts in lactation and nursing behaviour, 573
Betaine, **791**
Bioimpedance, **778**
Bloat, frothy
  prevention of bloat in cattle, 155
Bitter vetch (*Vicia ervilia*), **785**
Blood metabolites, **765**
Body temperature, **767**
Body weight, **788**
  multi-trait selection in geese, 197
Bone breakage
  bone breakage in end-of-lay hens, 745
Bovine, **757**, **759**, **777**
Bovine respiratory disease, **779**
Branding, **771**
Breast meat pH, **784**
Breed, **777**
Broiler, **785**, **791**
  wheat by-products in poultry nutrition for broilers, 429
Broiler breeder
  increasing dietary Ca in young broiler breeder hens, 411
Brown midrib
  pearl millet forage quality, 737
BTA19, **757**
Bull, commercial, **780**
By-pass protein, **776**
  Pichia pastoris as a rumen escape vehicle, 611
By-pass starch, **776**

Page numbers in **bold** refer to abstracts.

Calcium, **753**, **786**
Calcium homeostasis
calcium homeostasis in beef steers, 81
Calcium metabolism
increasing dietary Ca in young broiler breeder hens, 411
Calf
strategies for increased cow-calf productivity, 529
Calf, receiving, **774**
Calorimetry, **755**
Calpastatin gene, **755**
Canada pork grading
grade yield of pork carcasses, 297
Canola, **761**, **768**
Canola, genetically modified, **761**, **768**
Canola meal
supplemental carbohydrase affects feed intake of weaned pigs, 689
Canola oil
feeding canola oil and tallow affect pigs differently, 661
Cap-Trapper, **759**
Carbohydrase
supplemental carbohydrase affects feed intake of weaned pigs, 689
Carbohydrates
carbohydrate effect on methane emission, 265
Carcass
beef growth and carcass genetic parameters, 589
use of wheat screenings in swine diets, 403
Carcass characteristics, **762**
Carcass (beef) chilling
modified beef carcass chilling, 377
Carcass composition, **755**, **772**
feeding canola oil and tallow affect pigs differently, 661
use of high-fat oat in swine diets, 229
Carcass grade
ultrasonic imaging at feedlot entry, 165
Carcass merit, **749**, **754**
leptin and beef cattle feed efficiency, performance and carcass quality, 211
Carcass quality
carcass trait heritability in four beef breeds, 599
Carcass traits, **755**, **758**, **759**
steer growth performance in winter, 133
ultrasonic imaging at feedlot entry, 165
Castration, **771**
Cattle, **756**, **758**, **764**, **766**, **768**, **769**, **770**
calcium homeostasis in beef steers, 81
early detection of infection with infrared, 73
enzyme mode of action, 13
concentrate supplementation for cattle fed barley straw, 455, 467
follicle wave "switching", 145
ruminant feed enzyme technology, 23
ultrasonic imaging at feedlot entry, 165
Cattle, feedlot, **765**
Cattle welfare, **771**
Cellulase
enzyme mode of action, 13
ruminant feed enzyme technology, 23
Central test
degree of connectedness among test groups, 37
genetic parameters and breed differences for feed efficiency, 177
Charolais
beef growth and carcass genetic parameters, 589
Chelator
in vitro iron bioavailability, 305
Chemical component
rumen degradation characteristics of forages, 255
Chick
phosphorus equivalency value of phytase, 437
Chicken, egg-type, **790**
Chicken, meat-type, **790**
Chinese strain goose
evaluation of body weight of geese, 187
multi-trait selection in geese, 197
Cholesterol
effect of dietary fenugreek for cows, 725
CHORI-240 BAC clones, **757**
Chromosomal break point, **757**
Ciliate protozoa
antiprotozoal effects of tea seeds, 731
Cold stress, **767**
Collection yoke, **775**
Colour
frankfurter acceptability under different retail lights, 391
Commercial
industrialization of meat rabbit production, 349
Commercial bulls, **780**
Compost, **763**
Concentrate feeds, **776**
Concentrate level, **779**
Condensed corn distillers' solubles, **782**
Conditioning
training cattle with auditory signals, 567
Conjugated linoleic acid, **761**, **762**, **772**, **774**
milk CLA yield in response to dietary oil seeds, 113
polyunsaturated fatty acids and immune responses, 221
rats fed CLA, 537
Co-products, **782**
Consecutive cycles
follicle wave "switching", 145
Consensus sequences, **757**
Consumer
beef quality consumer thresholds, 631
Contemporary group, **780**
Contemporary issues
industrialization of meat rabbit production, 349
Cooking, **785**
Corn, **765**, **782**, **786**, **790**
Corn grain, **780**
Corn heat units, **782**
Corn silage, **779**
Corpus luteum
corpus luteum function following Ovsynch and CIDR, 721
Correlation, **775**
beef growth and carcass genetic parameters, 589
residual metabolizable energy intake, 291
Cottonseed, **768**
Covariance structure
mixed models for repeated data, 1
Cow
corpus luteum function following Ovsynch and CIDR, 721
Cow-calf, **762**, **772**
silage or silage-straw based diets for beef cows, 245
straw-silage diets for lactating beef cows, 237
cp4 epsps transgene, **761**, **768**
Cracked linted cottonseed, **768**
Crossbred cows, **770**
Crossbred steers
residual metabolizable energy intake, 291
Crossbreeding, **758**, **769**

Crosses
evaluation of body weight of geese, 187
Crude protein, **788**
Aspen parkland herbage dynamics, 149
Cryptosporidium, **763**
Cultivar
rumen degradation characteristics of forages, 255
Cy-dye fluorescence, **756**
Cysteine, **783**
Cytokines, **789**

Dairy cattle, **760**, **761**, **763**, **765**, **767**, **768**, **771**, **774**, **778**
alkanes for dairy cows, 277
methane mitigation for dairy cows, 319
milk CLA yield in response to dietary oil seeds, 113
nutritional practices on Manitoba dairy farms, 501
training cattle with auditory signals, 567
Dairy cattle, periparturient
dry matter intake and metabolic disorders, 337
Dairy cows and fatty acids
effect of dietary fenugreek for cows, 725
DAISYII incubator, **772**
Decontamination, **786**
Delayed type hypersensitivity
polyunsaturated fatty acids and immune responses, 221
Deoxynivalenol, **783**, **786**
Determining factors
voluntary feed intake in pigs, 549
Detoxification, **785**
Diet, **777**, **783**
Diet manipulation, **751**
Dietary antibiotics, **785**
Dietary calcium
increasing dietary Ca in young broiler breeder hens, 411
Dietary energy, **772**
Dietary Zn and Cu, **789**
Differentially expressed genes, **756**
Digestibility, **761**, **786**, **787**, **788**, **789**, **790**
effect of EDTA on veal calf performance, 649
extrusion of feeds for mink, 673
supplemental carbohydrase affects feed intake of weaned pigs, 689
use of high-fat oat in swine diets, 229
use of Linpro in swine diets, 681
use of wheat screenings in swine diets, 403
Digestible energy, **753**, **783**, **784**, **788**
Digestion, **768**
concentrate supplementation for cattle fed barley straw, 455
enzyme mode of action, 13
ruminant feed enzyme technology, 23
small intestinal starch digestion, 309
Digestion kinetics, **770**
Digestive proteases, **793**
Diplodus sargus, **793**
Direct feed microbials, **770**
Disease, early detection of, **779**
Distiller's dried grains, **792**
Diversity, **753**
Dominance effects, **758**
DNA
full-length cDNA libraries, **759**
Dry matter, **765**
Dry matter intake, **788**
dry matter intake and metabolic disorders, 337

Early and late weaning
winter feeding strategies for beef cows, 511
Economic benefit, **749**
Economic values
maternal index for sheep, 713
Ecosystem function, **753**
Ecosystem services, **753**
Efficiency, **762**
Egg production
multi-trait selection in geese, 197
Egg-type chicken, **790**
Embden strain goose
evaluation of body weight of geese, 187
Endogenous amino acids, **787**
Energetics, **753**
Energy, **789**, **790**
Energy source, **780**
Enhanced pork
enhanced pork streaking, 385
Enteric fermentation
feedlot greenhouse gas emissions, 445
Enteric methane
methane mitigation for dairy cows, 319
Enticer, **773**
Environment, **764**
Environmental sustainability, **749**
Enzyme, **786**
enzyme mode of action, 13
laying hens fed wheat, 397
ruminant feed enzyme technology, 23
wheat by-products in poultry nutrition for broilers, 429
Epistatic effects, **758**
Equivalency
phosphorus equivalency value of phytase, 437
Escherichia coli O157:H7, **763**, **765**, **770**
Essential oils, **771**, **791**
Estrus synchronization, **772**
Ethylenediaminetetraacetic acid (EDTA)
dietary EDTA and veal quality and stability, 639
effect of EDTA on veal calf performance, 649
Evening feeding
winter feeding of feedlot heifers, 491
Ewe lambs, **769**, **776**
Excretion
dietary protein and sugar beet pulp and N excretion in pigs, 717
Expected progeny difference, **755**
Extended photoperiod
winter feeding of feedlot heifers, 491
Extrusion, **775**
extrusion of feeds for mink, 673
use of Linpro in swine diets, 681

Faba bean, **792**
Fasting, **768**
Fat
frankfurter acceptability under different retail lights, 391
rats fed CLA, 537
Fat, abdominal and intestinal
multi-trait selection in geese, 197
Fat, intramuscular
variation of fat along porcine longissimus muscle, 57
Fat thickness
grade yield of pork carcasses, 297
Fatty acid, **775**
flaxseed for dairy cows, 705
Fatty acid, volatile **760**
Feed analysis, **772**
Feed chemistry
chemical features of ultra-structural matrix of barley endosperm tissue, 523
Feed efficiency, **749**, **755**, **766**, **769**
Feed ingredients, **753**
Feed intake, **760**, **777**
leptin and beef cattle feed efficiency, performance and carcass quality, 211
supplemental carbohydrase affects feed intake of weaned pigs, 689

Feed intake, residual, **749**, **766**, **769**, **780**
Feed intake, voluntary
voluntary feed intake in pigs, 549
genetic parameters and breed differences for feed efficiency, 177
Feed selection, **767**
Feed supplements
prevention of bloat in cattle, 155
Feed withdrawal, **784**
Feed withdrawal supplement, **784**
Feeding
rats fed CLA, 537
Feeding frequency
concentrate supplementation for cattle fed barley straw, 455, 467
Feeding level, **777**
Feeding method, **788**
Feeding strategy
steer growth performance in winter, 133
Feeding value
wheat by-products in poultry nutrition for broilers, 429
Feedlot, **763**, **773**
Feedlot cattle, **765**
Feedlot heifers
winter feeding of feedlot heifers, 491
Feedlot steers
feedlot greenhouse gas emissions, 445
Fenugreek
effect of dietary fenugreek for cows, 725
Fermentation, **760**, **770**, **776**, **782**
Fermentation rate, **764**
Fertility, **769**
Fertilizer
N fertilizer effect on cattle production, 91
Fibre, **771**, **783**, **784**
dietary protein and sugar beet pulp and N excretion in pigs, 717
nutritional practices on Manitoba dairy farms, 501
wheat by-products: chemical composition, 421
Fibre digestion
enzyme mode of action, 13
ruminant feed enzyme technology, 23
Fibre type
dietary EDTA and veal quality and stability, 639
Fibrolytic, **768**
Fibrolytic enzymes, **766**, **769**, **776**
Finishing pigs, **785**
First-pass metabolism, **782**
Fish physiology, **793**
Fish proteases, **793**
Flax
use of Linpro in swine diets, 681
Flaxseed, **775**, **779**
flaxseed for dairy cows, 705
feeding value of dehulled flaxseed, 545
Folic acid
folic acid supplementation on the uterine environment of sows, 63
Follicle dynamics
follicle wave "switching", 145
Follicle-stimulating hormone
follicle wave "switching", 145
Follicle wave
follicle wave "switching", 145
Forage, **753**, **780**
rumen degradation characteristics of forages, 255
Forage chop length, **760**
Forage-grain diets
residual metabolizable energy intake, 291
Forage particle size, **779**
Forage production
Aspen parkland herbage dynamics, 149
Forage quality, **761**, **787**
pearl millet forage quality, 737
relation of fermentation profiles to weight gain in steers, 105
Frankfurter
frankfurter acceptability under different retail lights, 391
Frothy bloat
prevention of bloat in cattle, 155
Full-length cDNA libraries, **759**
Fumaric acid, **776**
Fusarium head blight, **764**
Fusarium graminearum, **764**

Gain
silage or silage-straw based diets for beef cows, 245
straw-silage diets for lactating beef cows, 237
Gas emissions, **751**
Gas production, **780**
relation of fermentation profiles to weight gain in steers, 105
Gastrointestinal tract, **783**
Gender, **788**
Gene expression
global gene expression in preadipocyte differentiation, 367
Gene sequence, **757**
Gene stability, **761**, **768**
General linear model
mixed models for repeated data, 1
Genetic correlation
genetic parameters and breed differences for feed efficiency, 177
Genetic evaluation, **749**, **755**, **758**
degree of connectedness among test groups, 37
Genetic improvement
maternal index for sheep, 713
Genetic parameters
beef growth and carcass genetic parameters, 589
carcass trait heritability in four beef breeds, 599
ultrasound in sheep, 361
Genetically modified, **761**, **768**
Genetics, **749**
pig OB, OBR, PRLR and WAP MRNA levels in mammary glands, 621
Genotype analysis, **758**
Gestation
folic acid supplementation on the uterine environment of sows, 63
Ghrelin, **757**
Giardia, **763**
Gilt
feeding canola oil and tallow affect pigs differently, 661
Glucose
small intestinal starch digestion, 309
Glutathione, **783**
Genetically modified canola, **761**, **768**
Goose
evaluation of body weight of geese, 187
multi-trait selection in geese, 197
Grade yield
grade yield of pork carcasses, 297
Grain, **766**
Grain source, **788**
Grass, **760**
methane emissions and DMI of steers, 125
Grassland, upland
Aspen parkland herbage dynamics, 149
Grazing, **775**
Grazing ecosystems, **753**
Green fluorescent protein
Pichia pastoris as a rumen escape vehicle, 611
Greenhouse gas, **751**, **765**, **785**
feedlot greenhouse gas emissions, 445

Growing pigs, **788**
Growing-finishing pigs, **781**
Growth, **756**, **758**, **769**, **789**, **791**
beef growth and carcass genetic parameters, 589
use of high-fat oat in swine diets, 229
use of Linpro in swine diets, 681
Growth implant
steer growth performance in winter, 133
Growth performance, **762**, **770**
Growth promotant
steer growth performance in winter, 133
Guar gum, **787**
carbohydrate effect on methane emission, 265
Gut flora, **785**
Gut microflora, **789**
Gut strength, **791**

Haemoglobin
effect of EDTA on veal calf performance, 649
Hair sheep, **769**
Half-sib design, **756**
Haplotype analysis, **759**
Harmonic mean
degree of connectedness among test groups, 37
Health, **774**
Heat production, **777**, **785**
concentrate supplementation for cattle fed barley straw, 455
Heat stress
increasing dietary Ca in young broiler breeder hens, 411
Heat treatment
flaxseed for dairy cows, 705
Heifer
N fertilizer effect on cattle production, 91
Heifer, feedlot
winter feeding of feedlot heifers, 491
Hemicellulase
enzyme mode of action, 13
ruminant feed enzyme technology, 23
Hemp seed, **774**
Hepatic lipidosis
dry matter intake and metabolic disorders, 337
Hepatic metabolism, **782**
Herb
organic acids and herbal extracts in weanling pigs, 697
Herbal extracts, **785**
Heritability
genetic parameters and breed differences for feed efficiency, 177
ultrasound in sheep, 361
High-fat oat
use of high-fat oat in swine diets, 229
Hog manure, **761**, **787**
Hoof temperature, **760**
Hormone, **763**
Hungarian geese
evaluation of body weight of geese, 187
Hydrogen sulphide, **752**

Ileum, **786**, **787**
Immune response
organic acids and herbal extracts in weanling pigs, 697
Immunoglobulins
polyunsaturated fatty acids and immune responses, 221
Immunohistochemistry, **756**
Indicator amino acid oxidation, **789**
Industry
industrialization of meat rabbit production, 349
Infection
early detection of infection with infrared, 73
Infrared thermography, **760**, **767**, **779**
early detection of infection with infrared, 73
Inhibition, **783**
In sacco, **771**
Insulin-like growth factor-I, **765**, **769**
In vitro
in vitro iron bioavailability, 305
In vitro dry matter digestibility, **772**
In vitro N transformation, **780**
Intake, **762**
alkanes for dairy cows, 277
Interleukin-2
folic acid supplementation on the uterine environment of sows, 63
Intestinal morphology
organic acids and herbal extracts in weanling pigs, 697
Intestine, **781**, **791**
Intramuscular fat
variation of fat along porcine longissimus muscle, 57
Ionophore, **763**
Iron
in vitro iron bioavailability, 305
Iron bioavailability
effect of EDTA on veal calf performance, 649

Jerusalem artichoke
carbohydrate effect on methane emission, 265

Ketosis
dry matter intake and metabolic disorders, 337

Lactation, **790**
recorded gruntings and sow mammary development, 581
recorded sow nursing grunts in lactation and nursing behaviour, 573
Lactic acid
concentrate supplementation for cattle fed barley straw, 467
Lactose, **791**
Lamb, ewe **769**, **776**
Laminitis, **760**
Larval development, **793**
Laying hens, **787**
bone breakage in end-of-lay hens, 745
feeding value of dehulled flaxseed, 545
laying hens fed wheat, 397
Learning
training cattle with auditory signals, 567
Leptin, **749**, **754**
leptin and beef cattle feed efficiency, performance and carcass quality, 211
Leptin gene, **758**, **759**
Light
frankfurter acceptability under different retail lights, 391
winter feeding of feedlot heifers, 491
Lignin
carbohydrate effect on methane emission, 265
Lipopolysaccharide, **789**
Litter, **791**
Litter performance
recorded sow nursing grunts in lactation and nursing behaviour, 573
Location, **782**
Longissimus muscle
variation of fat along porcine longissimus muscle, 57
Longissimus thoracis
postmortem ageing of bovine muscles, 301
Lysine, **781**, **783**
Lysine degradation, **781**, **783**

Lysine α-ketoglutarate reductase, **781**, **783**

Malic acid, **776**
Mammary biopsies, **768**
Mammary development
  recorded gruntings and sow mammary development, 581
Mammary glands
  pig OB, OBR, PRLR and WAP MRNA levels in mammary glands, 621
Manure, **752**, **763**, **773**
Manure, hog, **761**, **787**
Manure packs
  feedlot greenhouse gas emissions, 445
Manure storage, **751**
Marbling
  modified beef carcass chilling, 377
  ultrasonic imaging at feedlot entry, 165
Marbling score
  variation of fat along porcine longissimus muscle, 57
Maternal characteristics
  maternal index for sheep, 713
Maturity
  rumen degradation characteristics of forages, 255
Meadow bromegrass
  strategies for increased cow-calf productivity, 529
Meat
  frankfurter acceptability under different retail lights, 391
Meat quality, **755**, **758**, **759**, **779**
Meat-type chicken, **790**
Medicago sativa L.
  prevention of bloat in cattle, 155
Meishan
  pig OB, OBR, PRLR and WAP MRNA levels in mammary glands, 621
  recorded gruntings and sow mammary development, 581
  recorded sow nursing grunts in lactation and nursing behaviour, 573
Metabolic rate, **755**
Metabolizable energy, **753**, **786**
Metabolizable energy intake, **772**, **777**
Methane, **755**, **765**, **774**, **775**
  carbohydrate effect on methane emission, 265
  methane emissions and DMI of steers, 125
Methane production, **777**
Methionine, **789**
Mexico, **769**
Microarray, **756**
Microbial, **778**
Microbial enzymes, **770**
Microbial proteins
  maximizing microbial protein supply to beef cattle, 481
Microbiota
  organic acids and herbal extracts in weanling pigs, 697
Microcapsulation, **776**
Micronization, **775**
Milk
  recorded gruntings and sow mammary development, 581
Milk composition, **765**, **775**
Milk fatty acid, **771**, **779**
Milk production
  milk CLA yield in response to dietary oil seeds, 113
  nutritional practices on Manitoba dairy farms, 501
Milk production responses, **768**
Milk quality, **773**
Milk yield, **765**
  strategies for increased cow-calf productivity, 529
Mineral
  nutritional practices on Manitoba dairy farms, 501
Mineral supplements
  determination of selenium oxidation state using XANES, 171
Mink
  extrusion of feeds for mink, 673
Mitigation
  methane mitigation for dairy cows, 319
Mixed model
  mixed models for repeated data, 1
Molasses, **780**
Monensin, **771**
Monitoring devices, **763**, **765**
Monosodium phosphate
  phosphorus equivalency value of phytase, 437
mRNA
  pig OB, OBR, PRLR and WAP mRNA levels in mammary glands, 621
Muscle
  rats fed CLA, 537
Muscle depth
  grade yield of pork carcasses, 297
Muscle tissue
  PPARγ MRNA in bovine adipose and muscle tissue, 49
Muskox, **772**, **777**
Mycotoxin, **786**

Needle injection
  enhanced pork streaking, 385
Net energy, **753**
Nitrogen, **751**, **773**
  dietary protein and sugar beet pulp and N excretion in pigs, 717
  N fertilizer effect on cattle production, 91
Nitrogen-15, **780**
Nitrogen balance, **787**
Non-additive effects, **758**
Non-ruminants
  determination of selenium oxidation state using XANES, 171
Nonstarch polysaccharides, **751**
Nutrients, **789**, **790**
Nutrient digestibility, **781**
Nutrient requirements of poultry, **753**
Nutrition, **753**, **764**
Nutritional value, **792**
Nutritive value, **782**
Nutritive and botanical composition
  wheat by-products: chemical composition, 421
Nylon bags, **780**

Odour, **751**
Oil, **761**, **778**
Oleic acid, **777**
Organic acid, **786**
  organic acids and herbal extracts in weanling pigs, 697
Ovulation, **790**
Ovulation synchronization
  corpus luteum function following Ovsynch and CIDR, 721
Oxidative stability, **779**
  dietary EDTA and veal quality and stability, 639

Parkland, western Canadian
  winter feeding strategies for beef cows, 511
Particle size, **767**
  nutritional practices on Manitoba dairy farms, 501
Pasture
  methane emissions and DMI of steers, 125
  N fertilizer effect on cattle production, 91
Pasture productivity
  strategies for increased cow-calf productivity, 529

Pearl millet
pearl millet forage quality, 737
Pearling, **783**
Pea
use of Linpro in swine diets, 681
Performance, **754**, **769**, **774**
use of wheat screenings in swine diets, 403
Periparturient dairy cattle
dry matter intake and metabolic disorders, 337
Peyer's patch, **759**
pH, **776**
Phosphorus, **751**, **753**, **764**, **773**
phosphorus equivalency value of phytase, 437
Phosphorus utilization, **787**
Photoperiod, **790**
Photostimulation
increasing dietary Ca in young broiler breeder hens, 411
Physically effective NDF, **760**
Physiology, **749**
Phytase, **781**, **786**, **787**, **788**, **789**
phosphorus equivalency value of phytase, 437
Phytate, **788**
wheat by-products: chemical composition, 421
Phytate phosphorus, **789**
Pichia pastoris
Pichia pastoris as a rumen escape vehicle, 611
Pig, **751**, **752**, **784**, **786**, **788**, **789**, **790**, **792**
dietary protein and sugar beet pulp and N excretion in pigs, 717
pig OB, OBR, PRLR and WAP MRNA levels in mammary glands, 621
supplemental carbohydrase affects feed intake of weaned pigs, 689
use of wheat screenings in swine diets, 403
voluntary feed intake in pigs, 549
Pig, finishing, **785**
Pig, growing, **788**
Pig, growing-finishing, **781**
Pig, weaner, **791**
Piglet, **782**, **783**
organic acids and herbal extracts in weanling pigs, 697
Piglet, weaned **789**
Pilgrim strain goose
evaluation of body weight of geese, 187
Plant, **773**
Plasma cortisol, **771**
Polyunsaturated fatty acids
polyunsaturated fatty acids and immune responses, 221
Pork
variation of fat along porcine longissimus muscle, 57
Pork, enhanced
enhanced pork streaking, 385
Pork grading
grade yield of pork carcasses, 297
Positional candidate gene, **756**, **758**
Power, **756**
PPARγ cattle
PPARγ MRNA in bovine adipose and muscle tissue, 49
Prediction equations
voluntary feed intake in pigs, 549
Principal component analysis
rats fed CLA, 537
Processing, **760**
Production
industrialization of meat rabbit production, 349
N fertilizer effect on cattle production, 91
Progesterone
corpus luteum function following Ovsynch and CIDR, 721
Prolactin
winter feeding of feedlot heifers, 491
Proline, **782**
Prostaglandin
folic acid supplementation on the uterine environment of sows, 63
Protein
concentrate supplementation for cattle fed barley straw, 455, 467
dietary protein and sugar beet pulp and N excretion in pigs, 717
extrusion of feeds for mink, 673
nutritional practices on Manitoba dairy farms, 501
Protein fractions
pearl millet forage quality, 737
Protein intake, **785**
Protein level, **751**
Protein, protected, **776**
Protein supplements
maximizing microbial protein supply to beef cattle, 481
qRT-PCR, **756**

Quantitative trait loci, **756**
Quantitative trait loci detection, **756**

Rabbit
industrialization of meat rabbit production, 349
Receiving calves, **774**
REML, **756**
Repeated measures
mixed models for repeated data, 1
Residual feed intake, **749**, **766**, **769**, **780**
genetic parameters and breed differences for feed efficiency, 177
Residual metabolizable energy intake, 291, **775**
Resonance light scattering, **756**
Respiration chamber, **774**
Riparian meadow
Aspen parkland herbage dynamics, 149
Robotic milking, **773**
Rope, **763**, **765**
Roughage level, **770**
Roundup Ready®, **761**, **768**
Rumen, **778**
Rumen-cannulated, **778**
Rumen degradation characteristics
rumen degradation characteristics of forages, 255
Rumen degradability
chemical features of ultra-structural matrix of barley endosperm tissue, 523
Rumen fluid
antiprotozoal effects of tea seeds, 731
Rumen metabolite
concentrate supplementation for cattle fed barley straw, 467
Rumen microbe, **770**
Rumen pH, **759**, **760**
Ruminal biohydrogenation
flaxseed for dairy cows, 705
Ruminal degradability
pearl millet forage quality, 737
Ruminal degradation, **771**
Ruminal escape vehicle
Pichia pastoris as a rumen escape vehicle, 611
Ruminal fermentation, **780**
Ruminal fluid, **770**
Ruminal proteolysis, **776**
Ruminant, **775**
carbohydrate effect on methane emission, 265
determination of selenium oxidation state using XANES, 171
in vitro iron bioavailability, 305
small intestinal starch digestion, 309
Ruminant digestibility, **776**

Sampling
grade yield of pork carcasses, 297
Sampling halter, **775**
Sausage
frankfurter acceptability under different retail lights, 391
Scanning electronic microscopy, **776**
Seasonality, **763**
Seed, **761**, **778**
Selection, **766**, **769**
maternal index for sheep, 713
multi-trait selection in geese, 197
Selenium speciation
determination of selenium oxidation state using XANES, 171
Semimembranosus
postmortem ageing of bovine muscles, 301
Sensory characteristics, **779**
Sheep
antiprotozoal effects of tea seeds, 731
maternal index for sheep, 713
ultrasound in sheep, 361
Silage, **760**, **766**
silage or silage-straw based diets for beef cows, 245
straw-silage diets for lactating beef cows, 237
Single nucleotide polymorphism, **755**, **758**, **759**
Small intestine
small intestinal starch digestion, 309
Sodium carbonate, **786**
Soil, **751**
N fertilizer effect on cattle production, 91
Solubility
in vitro iron bioavailability, 305
Self organizing maps clustering
global gene expression in preadipocyte differentiation, 367
Sorghum, **764**, **786**
Sow, **789**
folic acid supplementation on the uterine environment of sows, 63
recorded gruntings and sow mammary development, 581
recorded sow nursing grunts in lactation and nursing behaviour, 573
Sow weaning to estrus interval, **790**
Soybean
milk CLA yield in response to dietary oil seeds, 113
Split-plot
mixed models for repeated data, 1
Starch, **771**
extrusion of feeds for mink, 673
small intestinal starch digestion, 309
Stearic acid, **777**
Steer, **759**, **766**, **770**
methane emissions and DMI of steers, 125
prevention of bloat in cattle, 155
Steroyl coA desaturate, **777**
Strain
bone breakage in end-of-lay hens, 745
Straw
concentrate supplementation for cattle fed barley straw, 455, 467
silage or silage-straw based diets for beef cows, 245
straw-silage diets for lactating beef cows, 237
Streaking
enhanced pork streaking, 385
Stress response, **771**
Subacute ruminal acidosis, **759**
Sulphur, **752**
Sulphur hexafluoride, **774**, **775**
Sunflower, **761**, **778**, **779**
milk CLA yield in response to dietary oil seeds, 113
Sunflower seeds, **762**
Swath grazing
winter feeding strategies for beef cows, 511
Swine, **782**, **783**, **787**, **788**
use of high-fat oat in swine diets, 229
use of Linpro in swine diets, 681
Swine liquid feeding, **782**
Synchrotron
determination of selenium oxidation state using XANES, 171
Synchrotron infrared microspectroscopy
chemical features of ultra-structural matrix of barley endosperm tissue, 523
Synthetic strain goose
evaluation of body weight of geese, 187
multi-trait selection in geese, 197

Tallow
feeding canola oil and tallow affect pigs differently, 661
Tannins, **776**
TBARS
dietary EDTA and veal quality and stability, 639
Tea seed
antiprotozoal effects of tea seeds, 731
Tenderness, **755**
beef quality consumer thresholds, 631
calcium homeostasis in beef steers, 81
carcass trait heritability in four beef breeds, 599
modified beef carcass chilling, 377
postmortem ageing of bovine muscles, 301
Test duration, **775**, **780**
residual metabolizable energy intake, 291
Thio-barbituric acid reactive substances, **779**
Threshold
beef quality consumer thresholds, 631
Timed weaning, **790**
Tissue fatty acids, **774**
Total mixed rations, **767**
Trans monoene, **772**
Turkey, **784**

UCP-2, **777**
Ultrasound, **772**, **755**
ultrasonic imaging at feedlot entry, 165
ultrasound in sheep, 361
Upland grassland
Aspen parkland herbage dynamics, 149
Urea
dietary urea and acid base balance in feedlot steers, 741

Vaccenic acid, **762**
Variability, **789**
Veal
effect of EDTA on veal calf performance, 649
Veal quality
dietary EDTA and veal quality and stability, 639
Visceral organs, **788**
Viscosity, **787**
Vitamin D, **786**
Vitamin D_3
calcium homeostasis in beef steers, 81
Volatile fatty acids, **760**
Voluntary feed intake
voluntary feed intake in pigs, 549
Warner-Bratzler shear
beef quality consumer thresholds, 631
Weaned piglets, **789**
Weaner pig, **791**

Weaning, early and late
winter feeding strategies for beef cows, 511
Weaning weight
silage or silage-straw based diets for beef cows, 245
straw-silage diets for lactating beef cows, 237
Weight endpoint, **766**
Weight gain
relation of fermentation profiles to weight gain in steers, 105
Western Canadian Parkland
winter feeding strategies for beef cows, 511
Wheat, **784**
laying hens fed wheat, 397
supplemental carbohydrase affects feed intake of weaned pigs, 689
Wheat by-products
wheat by-products in poultry nutrition for broilers, 429
Wheat screenings
use of wheat screenings in swine diets, 403
Wheat shorts, **788**
Within-muscle variation
variation of fat along porcine longissimus muscle, 57
Wool, **776**

XANES
determination of selenium oxidation state using XANES, 171

Zeolite, **773**